CLAIMS

1. A process for the preparation of a compound of formula R^1-Y^1-$P(NR^2R^3)_2$ which comprises:

a) reacting a compound of formula PX_3 with a compound of formula HNR^2R^3 to form a compound of formula X-$P(NR^2R^3)_2$; and

b) reacting the compound of formula X-$P(NR^2R^3)_2$ with a compound of formula R^1-Y^1-H in the presence of a solvent to form the compound of formula R^1-Y^1-$P(NR^2R^3)_2$;

wherein

R^1 represents a phosphorus protecting group;

R^2 and R^3 each independently represent an alkyl group, or R^2 and R^3 are joined, together with the N to which they are attached, to form a 5-7 membered ring;

Y^1 represents O or S; and

X represents a halogen;

characterised in that the solvent employed in reaction b) is a hydrocarbon solvent.

2. A process according to claim 1, wherein the reaction between the compound of formula PX_3 and the compound of formula HNR^2R^3 in step a) takes place in the presence of the same solvent employed for the reaction between the compound of formula X-$P(NR^2R^3)_2$ and the compound of formula R^1-Y^1-H in step b).

3. A process according to claim 1 or claim 2, wherein R^1 represents a methyl group, a group of formula $-CH_2CH_2-Si(CH_3)_2C_6H_5$, $-CH_2CH_2-S(O)_2-CH_2CH_3$ or $-CH_2CH_2-C_6H_4-NO_2$, a group of formula $-CH_2CH_2CN$, or a phenyl, 4-chlorophenyl, 2-chlorophenyl, 2-nitrophenyl or 4-nitrophenyl group.

4. A process according to claim 3, wherein R^1 represents a group of formula $-CH_2CH_2CN$ and Y^1 represents O.

5. A process according to any preceding claim, wherein R^2 and R^3 each independently represent a C_{1-6} alkyl group.

6. A process according to claim 5, wherein R^2 and R^3 represent isopropyl groups.

7. A process according to any preceding claim, wherein Y^1 represents O.

8. A process according to any preceding claim, wherein X represents Cl.

9. A process according to any preceding claim, wherein the hydrocarbon solvent is toluene.

10. A process according to any preceding claim, wherein the reaction between the compound of formula $X\text{-}P(NR^2R^3)_2$ and the compound of formula $R^1\text{-}Y^1\text{-}H$ in step b) takes place in the presence of a base.

11. A process according to claim 10, wherein the base is a tri(C_{1-4}alkyl)amine.

12. A process for the preparation of $\{[(CH_3)_2CH]_2N\}_2\text{-}P\text{-}O\text{-}CH_2CH_2CN$, which comprises
a) reacting PCl_3 with $[(CH_3)_2CH]_2N\text{-}H$ in toluene to form $\{[(CH_3)_2CH]_2N\}_2\text{-}P\text{-}Cl$; and
b) reacting $\{[(CH_3)_2CH]_2N\}_2\text{-}P\text{-}Cl$ with $HO\text{-}CH_2CH_2CN$ in toluene to form $\{[(CH_3)_2CH]_2N\}_2\text{-}P\text{-}O\text{-}CH_2CH_2CN$.

13. A process according to any preceding claim, wherein substantially anhydrous reaction conditions are employed.

14. A process for the preparation of a compound of formula $R^1\text{-}Y^1\text{-}P(NR^2R^3)_2$ which comprises reacting a compound of formula $X\text{-}P(NR^2R^3)_2$ with a compound of formula $R^1\text{-}Y^1\text{-}H$ in the presence of a solvent to form the compound of formula $R^1\text{-}Y^1\text{-}P(NR^2R^3)_2$
wherein
R^1 represents a phosphorus protecting group;
R^2 and R^3 each independently represent an alkyl group, or R^2 and R^3 are joined, together with the N to which they are attached, to form a 5-7 membered ring;
Y^1 represents O or S; and
X represents a halogen;
characterised in that the solvent is a hydrocarbon solvent.

15. A process according to claim 14, wherein R^1 represents $NCCH_2CH_2$-; Y^1 represents O; R^2 and R^3 are each isopropyl, X is chloro, and the hydrocarbon solvent is toluene.